DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-016208
Date Inspected: 15-Aug-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC)

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: N/A

Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Electrode to specification:	☐ Yes	☐ No	☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☐ Yes	☐ No	☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Approved WPS:**	☐ Yes	☐ No	☑ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

CWI Present: ☑ Yes ☐ No

Bridge No: 34-0006
Component: OBG Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 9DW

This QA Inspector witnessed the final bolt tension verification on bolts installed at the Corner Assembly connecting the Road Barrier Brackets, Inclined Truss Post and Vertical Truss Post at Cross Beam and Counter Weight side between Panel Points (PP) 80 and PP 82 for Segment 9DW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00453 dated August 15, 2010.

The bolt sizes used were M22 x 55 RC Lot # DHGM220044 and the final torque value established was 473 N-m.

The bolt sizes used were M22 x 85 RC Lot # DHGM220013 and the final torque value established was 433 N-m.

The bolt sizes used were M22 x 120 RC Lot # DHGM220053 and the final torque value established was 440 N-m.

The bolt sizes used were M24 x 60 RC Lot # DHGM240014 and the final torque value established was 567 N-m.

The bolt sizes used were M24 x 65 RC Lot # DHGM240002 and the final torque value established was 573 N-m.

The bolt sizes used were M24 x 80 RC Lot # DHGM240011 and the final torque value established was 533 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

Segment 9EW

This QA Inspector witnessed the final bolt tension verification on bolts installed at the Corner Assembly connecting the Road Barrier Brackets, Inclined Truss Post and Vertical Truss Post at Cross Beam and Counter Weight side between Panel Points (PP) 83 and PP 85 for Segment 9EW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00453 dated August 14, 2010.

The bolt sizes used were M22 x 55 RC Lot # DHGM220044 and the final torque value established was 473 N-m.

The bolt sizes used were M22 x 85 RC Lot # DHGM220013 and the final torque value established was 433 N-m.

The bolt sizes used were M22 x 120 RC Lot # DHGM220053 and the final torque value established was 440 N-m.

The bolt sizes used were M24 x 60 RC Lot # DHGM240014 and the final torque value established was 567 N-m.

The bolt sizes used were M24 x 65 RC Lot # DHGM240002 and the final torque value established was 573 N-m.

The bolt sizes used were M24 x 80 RC Lot # DHGM240011 and the final torque value established was 533 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

Segment 9EE to 10AE

This QA Inspector performed Dimension Control Inspection along with ABF QA personnel on the Transverse Splice T-Ribs to T-Ribs for the Segment 9EE to Segment 10AE between Panel Point (PP) 85 to PP 86 at the following locations:

Work Point E1 towards Work Point E3 (Side Panel Bike Path Side) a total of 19 T-Ribs.

Work Point E3 towards Work Point E4 (Bottom Panel) a total of 18 T-Ribs.

Work Point E4 towards Work Point E6 (Side Panel Cross Beam Side) a total of 19 T-Ribs.

The QA Inspector measured the Vertical Offset using a 1(One) Meter Straight Edge and measured the Horizontal Offset on the web using a Bridge Cam gauge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 10AW to 10BW

This QA Inspector performed Dimension Control Inspection for measuring Root Gap and Offset at the Transverse Splice for Segment 10AW to Segment 10BW between Panel Point (PP) 88 to PP 89 at the following locations:

Work Point W5 towards Work Point W6 (Edge Panel Cross Beam Side).

Work Point W6 towards Work Point W4 (Side Panel Cross Beam Side).

Work Point W4 towards Work Point W3 (Bottom Panel).

Work Point W3 towards Work Point W1 (Side Panel Counter Weight Side).

Work Point W1 towards Work Point W2 (Edge Panel Counter Weight Side).

Work Point W2 towards Work Point W5 (Deck Panel).

The QA Inspector measured the Root Gap using a 1(One) Taper Gauge and measured the Offset using a Bridge Cam gauge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 9AE to 10AE

This QA Inspector performed Dimension Control Inspection for measuring Root Gap and Offset at the Transverse Splice for Segment 9AE to Segment 10AE between Panel Point (PP) 85 to PP 86 at the following locations:

Work Point E2 towards Work Point E1 (Edge Panel Bike Path Side).

Work Point E1 towards Work Point E3 (Side Panel Bike Path Side).

Work Point E3 towards Work Point E4 (Bottom Panel).

Work Point E4 towards Work Point E6 (Side Panel Cross Beam Side).

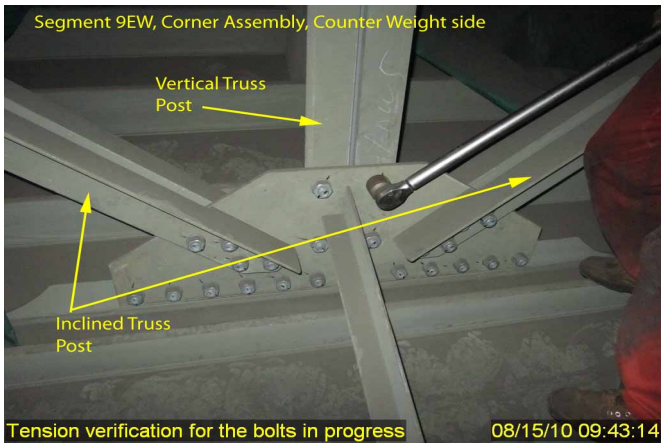
Work Point E6 towards Work Point E5 (Edge Panel Cross Beam Side).

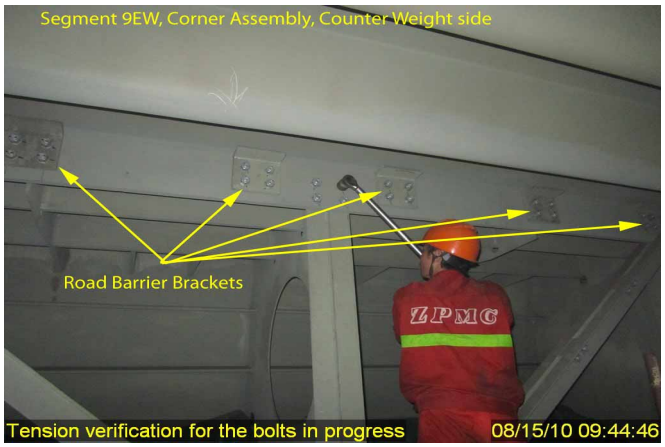
Work Point E5 towards Work Point E2 (Deck Panel).

The QA Inspector measured the Root Gap using a 1(One) Taper Gauge and measured the Offset using a Bridge Cam gauge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer